CODING AND DECODING OF VIDEO DATA

ABSTRACT

A novel method for coding and decoding video data and codec thereof are disclosed. The invented method provides an FGS (fine grained scalability) algorithm using bit plane coding technique. While conducting the bit plane encoding, the spatial and temporal dependence between bit planes is used to exploit the redundancy in the bit planes. In the embodiment of this invention, the bit plains are represented by quadtrees and bit plane prediction is made to remove the spatial and temporal redundancy in a video. The scalability of the video data is fine-grained since atoms of the motion residuals do not have to be grouped as coding units.